



9206/2812  
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DAC

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

LO et al.

Serial No. 09/243,433

Filed: February 3, 1999

For: Manufacturing Method for Making Tungsten-Plug In An Integrated  
Circuit Device Without Volcano Phenomena

:  
:  
:  
: Group Art Unit: 2812  
:  
: Examiner: Not Assigned  
:  
:

**PETITION UNDER 37 C.F.R. 1.181(a)**  
**REQUESTING WITHDRAWAL OF THE HOLDING OF ABANDONMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The undersigned attorney received a Notice of Abandonment Under 37 CFR 1.53(f) in connection with the above identified application. The Notice indicated that the above identified application is abandoned for failure to timely or properly reply to the Notice to File Missing Parts (Notice) mailed on March 3, 1999. The Notice was mailed on October 10, 2001. This petition has been timely filed.

Applicants have reviewed the file in detail and have concluded that the necessary response to the Notice to File Missing Parts of March 3, 1999 was timely filed on April 23, 1999. As evidence of the filing, Applicants submit herewith a USPTO stamped receipt card dated April 23, 1999, which acknowledges receipt of all of the appropriate papers and fees for a complete response. A copy of the endorsed and deposited check for this application is further evidence that the response was filed in the USPTO.

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Copies of the response and appropriate executed declaration are also included herewith to complete the file and place the file in condition for an examination on the merits.

Since the fee has been paid as evidenced by the Patent Office endorsed check, it is submitted that no further fees are necessary. However, please charge to our deposit account No. 02-0200 any necessary fee for Withdrawal of the Notice of Abandonment in connection with this application.

Respectfully submitted,

BACON & THOMAS, PLLC

By Richard E. Fichter  
Richard E. Fichter  
Registration No. 26,382

625 Slaters Lane - 4th Fl.  
Alexandria, Virginia 22314  
Phone: (703) 683-0500

REF:kdd  
Pet to Withdrw Abn.wpd

Date: November 8, 2001

Security enhanced document. See back for details.

**BACON & THOMAS** 7-86  
**COMMISSIONER OF PATENTS ACCOUNT**  
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DATE April 20, 1999

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# BACON & THOMAS

625 Slaters Lane 4th Fl., Alexandria, VA 22314

PATENT APPLICATION  
(PENDING)

Serial No: 09/243,433

Filed: February 23, 1999

Attorney: REF

Applicant(s): LO et al.

☒ MAILROOM

☐ ART UNIT

☐ \_\_\_\_\_

Special Instructions:

The PTO stamp hereon acknowledges receipt of:

- |   |   |  |
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| <input type="checkbox"/> Amendment/Response         | <input checked="" type="checkbox"/> Missing Parts Response w/Decl.  | <input type="checkbox"/> Request for Refund              |
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| <input type="checkbox"/> Preliminary Amendment      | <input type="checkbox"/> Notice of Appeal   |  |
| <input type="checkbox"/> Extension of Time Petition | <input type="checkbox"/> Substitute Declaration   |  |
| <input type="checkbox"/> Terminal Disclaimer        | <input type="checkbox"/> Information Disclosure Stmt. ---- <input type="checkbox"/> w/refs.   |  |
| <input type="checkbox"/> Reply Brief (Triplicate)   | <input type="checkbox"/> Request for CPA  |  |
| <input type="checkbox"/> Sheets of Drawings -       | <input type="checkbox"/> Formal <input type="checkbox"/> Informal   |  |
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Filed By:

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Application of:

VO et al.

Serial No.: 09/243,433

Filed: February 3, 1999

For: A method For Making a Tungsten-Plug In An Integrated Circuit  
Device Without Volcano Phenomena

Attention:

BOX MISSING PARTS

RESPONSE AND SUBMISSION OF MISSING PARTS OF APPLICATION  
HAVING BEEN GRANTED FILING DATE

Assistant Commissioner of Patents  
Washington, D.C. 20231

Sir:

This is in response to the Official Action dated March 3, 1999, in connection with the above-identified application. The period for response to the Official Action has been set to expire on May 3, 1999.

The Official Action acknowledges receipt of the application, but indicates that the Declaration under 37 C.F.R. §1.66 is unexecuted. Applicants submit herewith a properly and fully executed Declaration which identifies the application by serial number, title and by inventors. Form PTO-1533 is submitted herewith along with the required \$130.00 surcharge.

It is believed that the application is now in condition for examination. Accordingly, applicants most respectfully request that an Official Filing Receipt be issued and that the application be forwarded to the appropriate examining group for its examination in due course.

Respectfully submitted,  
BACON & THOMAS, PLLC

By: Richard E. Fichter  
RICHARD E. FICHTER  
Registration No. 26,382

625 Slaters Lane, Fourth Floor  
Alexandria, Virginia 22314  
Telephone: 703-683-0500  
Facsimile: 703-683-1080

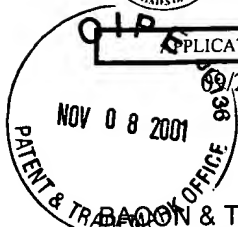
April 23, 1999

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## UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
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WASHINGTON, D.C. 20231  
www.uspto.gov



APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
09/243,433	02/03/1999	YUNG-TSUN LO	REF/LO535CIP

CONFIRMATION NO. 2498

ABANDONMENT/TERMINATION  
LETTER

\*OC000000006883117\*

BACON & THOMAS  
625 SLATERS LANE  
4TH FLOOR  
ALEXANDRIA, VA 223141176

Date Mailed: 10/10/2001

## NOTICE OF ABANDONMENT UNDER 37 CFR 1.53 (f) OR (g)

The above-identified application is abandoned for failure to timely or properly reply to the Notice to File Missing Parts (Notice) mailed on 03/03/1999.

A petition to the Commissioner under 37 CFR 1.137 may be filed requesting that the application be revived.

Under 37 CFR 1.137(a), a petition requesting the application be revived on the grounds of **UNAVOIDABLE DELAY** must be filed promptly after the applicant becomes aware of the abandonment and such petition must be accompanied by: (1) an adequate showing of the cause of unavoidable delay; (2) the required reply to the above-identified Notice; (3) the petition fee set forth in 37 CFR 1.17(l); and (4) a terminal disclaimer if required by 37 CFR 1.137(d).

Under 37 CFR 1.137(b), a petition requesting the application be revived on the grounds of **UNINTENTIONAL DELAY** must be filed promptly after applicant becomes aware of the abandonment and such petition must be accompanied by: (1) a statement that the entire delay was unintentional; (2) the required reply to the above-identified Notice; (3) the petition fee set forth in 37 CFR 1.17(m); and (4) a terminal disclaimer if required by 37 CFR 1.137(d).

Any questions concerning petitions to revive should be directed to "Office of Petitions" at (703) 305-9282.

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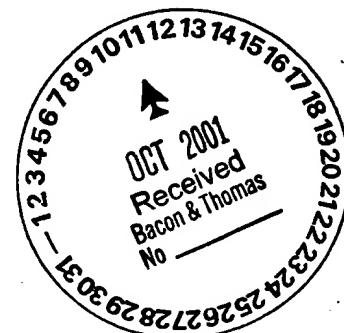
*A copy of this notice **MUST** be returned with the reply.*

NOV 09 2001

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DEPUTY A/C PATENTS

Customer Service Center  
Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



## DECLARATION FOR PATENT APPLICATION AND APPOINTMENT OF ATTORNEY

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name; I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention (Design, if applicable) entitled: **A METHOD FOR MAKING A TUNGSTEN-PLUG IN AN INTEGRATED CIRCUIT DEVICE WITHOUT VOLCANO PHENOMENA**

the specification of which (check one):

☐ is attached hereto, or ☒ was filed on: **February 3, 1999**

as U.S. Application Number: **09/243,433**

and (if applicable) was amended on:

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in *Title 37, Code of Federal Regulations, §1.56*. I hereby claim foreign priority benefits under *Title 35, United States Code §119* of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

PRIOR FOREIGN APPLICATION(S)			PRIORITY CLAIMED	
Number	Country	Day/Month/Year Filed	Yes	No

☐ Additional Priority Application(s) Listed on Following Page(s)

I HEREBY CLAIM THE BENEFIT UNDER TITLE 35 U.S. CODE §119(E) OF ANY U.S. PROVISIONAL APPLICATIONS LISTED BELOW.	
Application Number	Day/Month/Year Filed

☐ Additional Provisional Application(s) Listed on Following Page(s)

I hereby claim the benefit under *Title 35, United States Code, §120* of any United States application(s) or PCT international application(s) designating The United States of America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of *Title 35, United States Code, §112*, I acknowledge the duty to disclose information which is material to patentability as defined in *Title 37, Code of Federal Regulations, §1.56* which became available between the filing date of the prior application(s) and the national or PCT international filing date of this application:

Application Number	Filing Date	Status - Patented, Pending or Abandoned
08/651,535	May 22, 1996	Abandoned in favor of CIP

☐ Additional US/PCT Priority Application(s) listed on Following Page(s)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**POWER OF ATTORNEY:** I (We) hereby appoint as my (our) attorneys, with full powers of substitution and revocation, to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: J. Ernest Kenney, Reg. No. 19,179; Eugene Mar, Reg. No. 25,893; Richard E. Fichter, Reg. No. 26,382; Charles R. Wolfe, Jr., Reg. No. 28,680; Thomas J. Moore, Reg. No. 28,974; Joseph DeBenedictis, Reg. No. 28,502; Benjamin E. Urcia, Reg. No. 33,805; Chung C. Chen, Reg. No. 31,725; and

I (we) authorize my(our) attorneys to accept and follow instructions from Yuso International Patent and Trademark Office regarding any matter related to the preparation, examination, grant and maintenance of this application, any continuation, continuation-in-part or divisional based thereon, and any patent resulting therefrom, until I (we) or my(our) assigns withdraw this authorization in writing.

Send correspondence to: **BACON & THOMAS, PLLC**  
625 Slaters Lane - 4th Floor  
Alexandria, VA 22314-1176

Telephone Calls to:  
(703) 683-0500

FULL NAME OF FIRST OR SOLE INVENTOR <b>Yung-Tsun LO</b>		CITIZENSHIP <b>Taiwan</b>
RESIDENCE ADDRESS <b>No. 123, Lin Shen Rd. Lo Dong Town, Yi Lan</b>		POST OFFICE ADDRESS IS THE SAME AS RESIDENCE ADDRESS UNLESS OTHERWISE SHOWN BELOW
DATE <b>March 25, 1999</b>		SIGNATURE <b>Yung-Tsun, Lo</b>

See following page(s) for additional joint inventors.

## CONTINUATION OF DECLARATION FOR PATENT APPLICATION AND APPOINTMENT OF ATTORNEY

Page 2

FULL NAME OF JOINT INVENTOR Raymond TSAI	CITIZENSHIP Taiwan
RESIDENCE ADDRESS No. 656, Jing Cheng Rd. Taichung, Taiwan, R.O.C.	POST OFFICE ADDRESS IS THE SAME AS RESIDENCE ADDRESS UNLESS OTHERWISE SHOWN BELOW
DATE March 28. 1999	SIGNATURE Ray Tsai

FULL NAME OF JOINT INVENTOR Wen-Yu HO	CITIZENSHIP Taiwan
RESIDENCE ADDRESS No. 30, Alley 132, Fu Kuo Rd. 2 Yung Kang City	POST OFFICE ADDRESS IS THE SAME AS RESIDENCE ADDRESS UNLESS OTHERWISE SHOWN BELOW
DATE March 26. 1999	SIGNATURE Wen-Yu Ho

FULL NAME OF JOINT INVENTOR	CITIZENSHIP
RESIDENCE ADDRESS	POST OFFICE ADDRESS IS THE SAME AS RESIDENCE ADDRESS UNLESS OTHERWISE SHOWN BELOW
DATE	SIGNATURE

FULL NAME OF JOINT INVENTOR	CITIZENSHIP
RESIDENCE ADDRESS	POST OFFICE ADDRESS IS THE SAME AS RESIDENCE ADDRESS UNLESS OTHERWISE SHOWN BELOW
DATE	SIGNATURE

☐ See following pages for additional joint inventors/priority applications.

(04A001998)